Control Number: 50594

Item Number: 29

Addendum StartPage: 0

Public Utility Commission of Texas

Five-Year Report
Required by 16 Texas Admin. Code § 25.97(e)

PROJECT NO. 50594

AFFECTED ENTITY: CITY OF FLOYDADA

General Information

Pursuant to 16 Texas Admin. Code § 25.97(e)(1), not later than May 1 every five years, each affected entity that owns or operates overhead transmission facilities greater than 60 kilovolts must submit this report. The first report must be submitted not later than May 1, 2020.

Instructions

Answer all questions, fill-in all blanks, and have the report notarized in the Affidavit.

Affidavit

A representative of the affected entity must swear to and affirm the truthfulness, correctness, and completeness of the information provided by attaching a signed and notarized copy of the Affidavit provided with this form.

Filing Instructions

Submit four copies (an original and three copies) of the completed form and signed and notarized Affidavit to:

Central Records Filing Clerk
Public Utility Commission of Texas
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326
Telephone: (512) 936-7180

Affected Entity: CITY OF FLOYDADA **PROJECT NO.** 50594

1. Historical five-year reporting period: 2014-2019

What percentage of overhead transmission facilities greater than 60 kilovolts did you inspect for compliance with the National Electric Safety Code (NESC) relating to vertical clearance in the historical five-year reporting period?

Visually inspected 80% of 3 miles of transmission line, but never documented.

2. Future five-year reporting period: 2020-2025

What percentage of overhead transmission facilities greater than 60 kilovolts do you anticipate you will inspect for compliance with the NESC relating to vertical clearance during the future five-year reporting period beginning on January 1 of the year in which this report is submitted?

100%, and document time, date and any hazards or violations.

Affected Entity: CITY OF FLOYDADA **PROJECT NO.** 50594

AFFIDAVIT

I swear or affirm that I have personal knowledge of the facts stated in this report or am relying on people with personal knowledge, that I am competent to testify to them, and that I have the authority to submit this report on behalf of the affected entity. I further swear or affirm that all statements made in this report are true, correct, and complete.

Signature

RAY PEREZ
Printed Name

ELECTRIC SUPERINTENDENT
Job Title

CITY OF FLOYDADA
Name of Affected Entity

Sworn and subscribed before me this 2nd **day of** April, 2020
Month Year

TALI JACKSON
Notary Public, State of Texas
Notary ID# 1232812-6
My Commission Expires 05-07-2021

Notary Public in and For the State of Texas.

My commission expires on 05-07-2021.

2017 NESC Vertical Clearances

Railways

Neutral	23.5 ft
TPX	24 ft
Dist. Primary	26.5 ft

Highways – TX Administrative Code

Communications and Cable TV	18 ft
Electrical Lines	22 ft

Trucks Over 8 ft.

Neutral and Span Guys	15.5 ft
TPX	16 ft
Dist. Primary	18.5 ft

Fields, Orchards, Forest, Etc.

Neutral and Span Guy	15.5 ft
TPX	16 ft
Dist. Primary	18.5 ft

Pedestrians Only

Neutral and Span Guy	9.5 ft
TPX	12 ft
Dist. Primary	14.5 ft

Water – No Sailboat

Neutral and Span Guy	14 ft
TPX	14.5 ft
Dist. Primary	17 ft

Waterways Suitable for Sailing			Rigging or Launching Areas
		Less Than 20 Acres	
Neutral and Span Guy	17.5 ft		22.5 ft
TPX	18 ft		23 ft
Dist. Primary	20.5 ft		25.5 ft
		20 to 200 Acres	
Neutral and Span Guy	25.5 ft		30.5 ft
TPX	26 ft		31 ft
Dist. Primary	28.5 ft		33.5 ft
		200 to 2,000 Acres	
Neutral and Span Guy	31.5 ft		36.5 ft
TPX	32 ft		37 ft
Dist. Primary	34.5 ft		39.5 ft
		Over 2,000 Acres	
Neutral and Span Guy	37.5 ft		42.5 ft
TPX	38 ft		43 ft
Dist. Primary	40.5 ft		45.5 ft

Requirements – Training
Texas Utilities Code

SECTION. 38.102. REPORTS ON SAFETY PROCESSES AND INSPECTIONS

(a) Each electric utility, municipally owned utility, and electric cooperative that owns or operates overhead transmission or distribution assets shall submit to the commission a report that includes:

(1) a summary description of hazard recognition training documents provided by the utility or electric cooperative to its employees related to overhead transmission and distribution facilities; and

(2) a summary description of training programs provided to employees by the utility or electric cooperative related to the National Electrical Safety Code for the construction of electric transmission and distribution lines.

(b) An electric utility, municipally owned utility, or electric cooperative shall submit an updated report not later than the 30th day after the date the utility or electric cooperative finalizes a material change to a document or program included in a report submitted under Subsection (a).

(c) Not later than May 1 every five years, each electric utility, municipally owned utility, and electric cooperative that owns or operates overhead transmission facilities greater than 60 kilovolts shall submit to the commission a report for the preceding five-year period ending on December 31 of the preceding calendar year that includes:

(1) the percentage of overhead transmission facilities greater than 60 kilovolts inspected for compliance with the National Electrical Safety Code relating to vertical clearance in the reporting period; and

(2) the percentage of the overhead transmission facilities greater than 60 kilovolts anticipated to be inspected for compliance with the National Electrical Safety Code relating to vertical clearance during the five-year period beginning on January 1 of the year in which the report is submitted.

(d) Subject to Subsection (f), not later than May 1 of each year, each electric utility, municipally owned utility, or electric cooperative that owns or operates overhead transmission facilities greater than 60 kilovolts shall submit to the commission a report on the overhead transmission facilities for the preceding calendar year that includes information regarding:

(1) the number of identified occurrences of noncompliance with Section 38.004 regarding the vertical clearance requirements of the National Electrical Safety Code for overhead transmission facilities;

(2) whether the utility or electric cooperative has actual knowledge that any portion of the utility's or electric cooperative's transmission system is not in compliance with Section 38.004 regarding the vertical clearance requirements of the National Electrical Safety Code; and

(3) whether the utility or electric cooperative has actual knowledge of violations of easement agreements with the United States Army Corps of Engineers relating to Section 38.004

regarding the vertical clearance requirements of the National Electrical Safety Code for overhead transmission facilities.

Note: U S Army Corps of Engineers have jurisdiction over all navigable water in the United States. Their clearance requirements and easement agreements are usually stricter than the NESC but the more stringent regulation of the two shall be conformed to.

(e) Subject to Subsection (f), not later than May 1 of each year, each electric utility, municipally owned utility, or electric cooperative that owns or operates overhead transmission facilities greater than 60 kilovolts or distribution facilities greater than 1 kilovolt shall submit to the commission a report for the preceding calendar year that includes:

(1) the number of fatalities or injuries of individuals other than employees, contractors, or other persons qualified to work in proximity to overhead high voltage lines involving transmission or distribution assets related to noncompliance with the requirements of Section 38.004; and

(2) a description of corrective actions taken or planned to prevent the reoccurrence of fatalities or injuries described by Subdivision (1).

(f) Violations resulting from, and incidents, fatalities, or injuries attributable to a violation resulting from, a natural disaster, weather event, or man-made act or force outside of a utility's or electric cooperative's control are not required to be included in the portions of the reports required under Subsections (d) and (e).

(g) Not later than September 1, each year the commission shall make the reports publicly available on the commission's Internet website.

(h) A report, and any required information contained in a report, made on an incident or violation under this section is not admissible in a civil or criminal proceeding against the electric utility, municipally owned utility, or electric cooperative, or the utility's or electric cooperative's employees, directors, or officers. The commission may otherwise take enforcement actions under the commission's authority.

SECTION 38.004. MINIMUM CLEARANCE STANDARD

(a) Notwithstanding any other law, a transmission or distribution line owned by an electric utility or an electric cooperative must be constructed, operated, and maintained, as to clearances, in the manner described by the National Electrical Safety Code Standard ANSI (c)(2), as adopted by the American National Safety Institute and in effect at the time of construction.

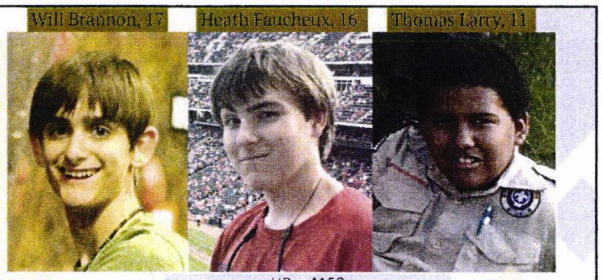
Means that even if something is written that is opposite in meaning to the provision; the provision will still apply. It is a formal way of saying that the provision will ALWAYS apply. In this case, even if the act or any other law says something opposed to that provision, it doesn't matter.

(b) An electric utility, municipally owned utility, or electric cooperative shall meet the minimum clearance requirements specified in Rule 232 of the National Electrical Safety Code Standard ANSI (c)(2) in the construction of any transmission or distribution line over all of the 178 lakes listed in this section.

Lakes Listed In Section 38.004

1. Abilene
2. Alan Henry
3. Alvarado Park
4. Amistad
5. Amon G. Carter
6. Aquilla
7. Arlington
8. Arrowhead
9. Athens
10. Austin
11. Averhoff
12. B. A. Steinhagen
13. Bachman
14. Balmorhea
15. Bardwell
16. Bastrop
17. Baylor Creek
18. Belton
19. Benbrook
20. Big Creek
21. Bob Sandlin
22. Bonham
23. Bonham State Park
24. Brady Creek
25. Brandy Branch
26. Braunig
27. Brazos
28. Bridgeport
29. Brownwood
30. Bryan
31. Bryson
32. Buchanan
33. Buffalo Creek
34. Buffalo Springs
35. Caddo
36. Calaveras
37. Canyon
38. Casa Blanca
39. Cedar Creek
40. Champion Creek
41. Choke Canyon
42. Cisco
43. Cleburne State Park
44. Clyde
45. Coffee Mill
46. Coleman
47. Coleto Creek
48. Colorado City
49. Conroe
50. Cooper
51. Corpus Christi
52. Crook
53. Cypress Springs
54. Daniel
55. Davy Crockett
56. Diversion
57. Dunlap
58. Eagle Mountain
59. E. V. Spence
60. Fairfield
61. Falcon
62. Fayette County
63. Findley
64. Fork
65. Ft Parker State Park
66. Ft Phantom Hill
67. Fryer
68. Georgetown
69. Gibbons Creek
70. Gilmer
71. Gladewater
72. Gonzales
73. Graham
74. Granbury
75. Granger
76. Grapevine
77. Greenbelt
78. Halbert
79. Hawkins
80. Holbrook
81. Hords Creek
82. Houston
83. Houston County
84. Hubbard Creek
85. Inks
86. Jacksboro
87. Jacksonville
88. J. B. Thomas
89. Joe Pool
90. Kemp
91. Kickapoo
92. Kirby
93. Kurth
94. Lady Bird
95. Lake O' The Pines
96. Lavon
97. Leon
98. Lewisville
99. Limestone
100. Livingston
101. Lone Star
102. Lost Creek
103. Lyndon B. Johnson
104. Mackenzie
105. Marble Falls
106. Marine Creek
107. Martin Creek
108. McClellan
109. Medina
110. Meredith
111. Meridian State Park
112. Mexia
113. Mill Creek
114. Millers Creek
115. Mineral Wells
116. Monticello
117. Moss
118. Mountain Creek
119. Muenster
120. Murvaul
121. Nacogdoches
122. Naconiche
123. Nasworthy
124. Navarro Mills
125. New Ballinger
126. Nocona
127. Oak Creek
128. O. C. Fisher
129. O. H. Ivie

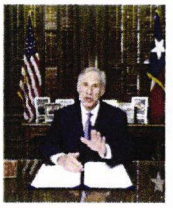
130. Palestine
131. Palo Duro
132. Palo Pinto
133. Pat Cleburne
134. Pat Mayse
135. Pinkston
136. Placid
137. Possum Kingdom
138. Proctor
139. Purtis Creek
140. Quitman
141. Raven
142. Ray Hubbard
143. Ray Roberts
144. Red Bluff
145. Richland-Chambers
146. Sam Rayburn
147. Sheldon
148. Somerville
149. Squaw Creek
150. Stamford
151. Stillhouse Hollow
152. Striker
153. Sulphur Springs
154. Sweetwater
155. Tawakoni
156. Texana
157. Texoma
158. Timpson
159. Toledo Bend
160. Tradinghouse Creek
161. Travis
162. Twin Buttes
163. Tyler
164. Waco
165. Walter E. Long
166. Waxahachie
167. Weatherford
168. Welsh
169. Wheeler Branch
170. White River
171. White Rock
172. Whitney
173. Wichita
174. Winnsboro
175. Winters-Elm Creek
176. Wood
177. Worth
178. Wright Patman



HB – 4150

Will Thomas Heath Powerline Safety Act

- Texas Governor Greg Abbott signed the William Thomas Heath Power Line Safety Act, HB 4150 into law on June 14, 2019, with the Act becoming effective September 1, 2019.



- The Act requires utilities to submit various reports on training, inspections, compliance, and incidents. The first report is due by May 1, 2020.

Utilities Required to Train & Report

There are three categories of electric utilities required to submit various reports to the Texas Public Utilities Commission.

1. Electric utilities with distribution facilities only.
2. Electric utilities with transmission facilities only.
3. Electric utilities with both distribution and transmission facilities.

Some of these reports will be annual and some on a 5 year reporting schedule. Again, the first of these reports are due May 1, 2020.

Requirements – Training Sec. 38.102. REPORTS ON SAFETY PROCESSES AND INSPECTIONS.

What does It Say?

1. Submit Summary of Hazard Recognition Training for Employees
2. Submit Summary of NESC Training for Employees
3. Submit within 30 days any Changes to Report or Program

Requirements – Training Sec 38 102. REPORTS ON SAFETY PROCESSES AND INSPECTIONS.

What does It Say?

1. For Utilities Owning or Operating Transmission above 60 KV Every 5 years a Report Must be Submitted to the Commission No later than May 1st.
2. Report must Include the Percent of the Transmission System Inspected in the Period Relating to NESC Vertical Clearances
3. The Percent Anticipated to be Inspected in the Period Relating to NESC Vertical Clearance

Requirements – Training Sec 38 102 REPORTS ON SAFETY PROCESSES AND INSPECTIONS.

For Utilities Owning or Operating Transmission above 60 KV

1. Every year by May 1st a Report Including the Number of Noncompliance Occurrences Identified and Whether They Have Actual Knowledge of Any Portions Which are Noncompliant with NESC Vertical Clearances
2. Whether They Have Actual Knowledge of Any Violations of Easement Agreements with U S. Corp of Engineers

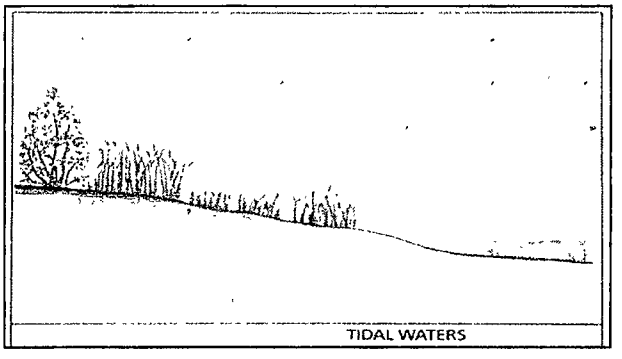
Note U S Army Corps of Engineers have jurisdiction over all navigable water in the United States Their clearance requirements and easement agreements are usually more stringent than the NESC but the more stringent regulation of the two shall be conformed to

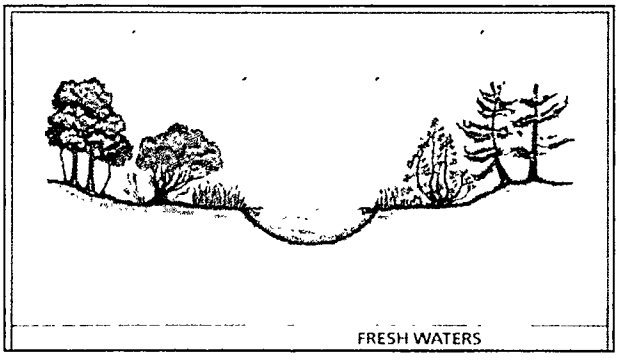
Recognition of Army Corps of Engineers Authority is in

US Army Corps of Engineers

What are the Limits of the Corps Jurisdiction?

- The Corps regulations broadly define two important terms, "waters of the United States" for the purpose of Section 404 of the Clean Water Act, and "navigable waters of the United States" for Section 10 of the Rivers and Harbors Act
- Section 404 of the Clean Water Act defines the landward limit of jurisdiction as the high tide line in tidal waters and the ordinary high water mark as the limit in non-tidal waters





Requirements – Reporting Sec 38 102 REPORTS ON SAFETY PROCESSES AND INSPECTIONS

What Does It Say?

Every System Operating Above 60KV Transmission and Above 1KV Distribution Must Submit a Report Each Year No Later than May 1st

Including the Number of Fatalities or Injuries to Nonqualified Persons Involving Noncompliant Portions of the System

And a Description of Corrective Actions Taken or Planned to Prevent the Reoccurrence of Fatalities or Injuries

Requirements – Reporting Sec 38 102 REPORTS ON SAFETY PROCESSES AND INSPECTIONS.

Violations and Incidents Resulting from a Natural Disaster, Weather Event, or Force Outside of a Utility's Control are not Required to be Included in the Reports

By September 1, Each Year the Commission Shall Make the Reports Publicly Available on the Commission's Internet Website

The Report, is not Admissible in a Civil or Criminal Proceeding Against the Electric Utility or the Utility's Employees, Directors, or Officers

The Commission May Otherwise Take Enforcement Actions Under The Commission's Authority

Understanding Chapter 38 Section 38.004 of the Texas Utilities Code: Minimum Clearance Standard

Sec 38 004 MINIMUM CLEARANCE STANDARD

(a) Notwithstanding Any Other Law, A Transmission Or Distribution Line Owned by An Electric Utility Must Be Constructed, Operated, and Maintained, as to Clearances, in the Manner Described by the National Electrical Safety Code Standard ANSI (C)(2), as Adopted by the American National Safety Institute and in Effect at the Time of Construction

Means that even if something is written that is opposite in **meaning** to the provision, the provision will still apply. It is a formal way of saying that the provision will ALWAYS apply. In this case, even if the **act** or **any other law** says something opposed to that provision, it doesn't matter.

Understanding Chapter 38 Section 38.004 of the Texas Utilities Code: Minimum Clearance Standard

Sec. 38.004. MINIMUM CLEARANCE STANDARD.

(b) Electric Utilities, Shall Meet The Minimum Clearance Requirements Specified In Rule 232 of the National Electrical Safety Code Standard ANSI (c)(2) in the Construction of any Transmission or Distribution Line Over All of The 178 Lakes Listed in This Section. (Hand-Out)

CHAPTER 38. REGULATION OF ELECTRIC SERVICES SUBCHAPTER A. STANDARDS

Sec. 38.001. GENERAL STANDARD.

An Electric Utility Shall Furnish Service, Instrumentalities, and Facilities that are Safe, Adequate, Efficient, and Reasonable.

Meeting This Standard Means That Utilities Must Maintain Their System's Infrastructure in a Safe, Reliable Condition for the Public, as Well as for Employees.

What is a Hazard?

A Hazard Is An Unsafe Act Or Unsafe Condition With Potential To Cause Illness, Injury, Or Death To People Or Animals, Damage To Property, Damage To The Environment, Or A Combination Of These.

Hazard Recognition

Designed to Identify, Report, Repair, Eliminate and Document any Potential Hazard on the Utilities' Infrastructure.

Reporting Hazardous Conditions

When A Hazardous Condition Is Observed, Regardless Of The Department In Which The Condition Exists, The Employee Shall Report It Promptly To A Proper Authority And When Necessary Guard The Area.

Some Reasons Why....

- Your Safety
- Your Crew's Safety
- The Public's Safety
- Company Policy
- Safety Manual

Reporting Hazardous Conditions Continued

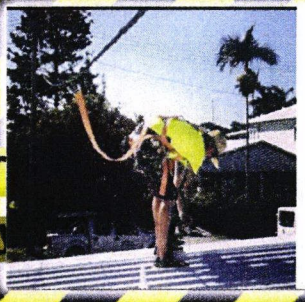
An Employee Who Receives A Report Of Any Hazardous Emergency Condition Shall Try To Obtain The Name Of The Informant, The Exact Location, And The Nature Of The Trouble/Hazard. The Employee Shall Immediately Refer This Information To The Person Having Responsibility For Such Matters.

Hazard Types

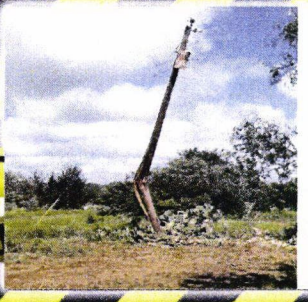
1. Obvious Hazards
2. Concealed Hazards
3. Developing Hazards
4. Transient Hazards

No program means...

- Service Disruption
- Strained Public Relations
- Possible Litigation



Some people never realize that they are in danger from their actions.



Hazards can be created in many ways.

- Be Vigilant In Recognizing Hazards
- Don't Be Afraid To Turn In Suspicious Looking Problems.
- Use Common Sense
- If Any Question About Safety, Take Care Of The Problem ASAP.

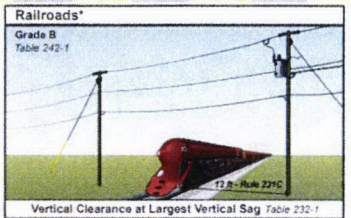
Clearance Requirements 2017 NESC Table 232-1

Texas Electric Cooperatives

Know Your Required Power Line Clearances

Railroads*

Grade B
Table 242-1



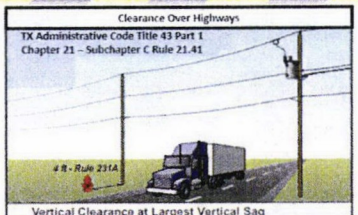
Vertical Clearance at Largest Vertical Sag *Table 232-1*

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
23.5 ft		24.0 ft	26.5 ft		

**Railroad company may require greater clearance*

Clearance Over Highways

TX Administrative Code Title 43 Part 1
Chapter 21 – Subchapter C Rule 21.41

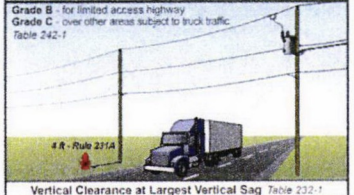


Vertical Clearance at Largest Vertical Sag

Comm. & Cable TV Lines	Electric Lines
18'	22'

Trucks Over 8 Feet*

Grade B - for limited access highway
Grade C - over other areas subject to truck traffic
Table 242-1

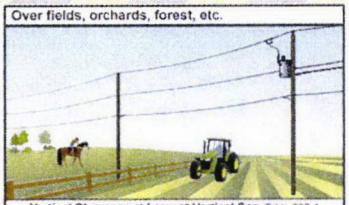


Vertical Clearance at Largest Vertical Sag *Table 232-1*

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
15.5 ft		16.0 ft	18.5 ft		

Other than Roads covered by TX Administrative Code .

Over fields, orchards, forest, etc.



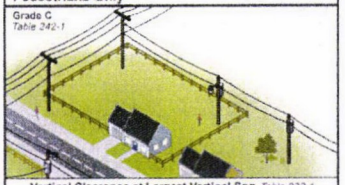
Vertical Clearance at Largest Vertical Sag *Table 232-1*

Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
15.5 ft		16.0 ft	18.5 ft		

**used by vehicles over 8 feet tall or riders on horseback*

Pedestrians Only*

Grade C
Table 242-1



Vertical Clearance at Largest Vertical Sag *Table 232-1*

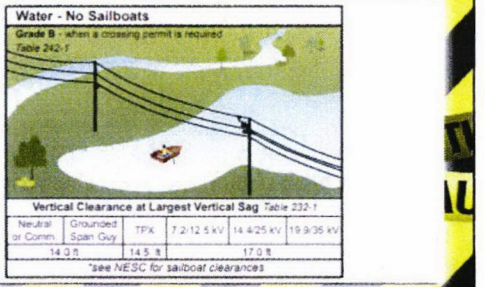
Neutral or Comm.	Grounded Span Guy	TPX	7.2/12.5 kV	14.4/25 kV	19.9/35 kV
9.5 ft		12.0 ft	14.5 ft		

**Not normally used by trucks or riders on horseback (very steep hills, swamps, etc.)*

The NESC Clearance Requirements Are Different Depending On Whether Or Not The Waterway Is Suitable For Sail-boating.

Additionally, the NESC Publishes Separate Clearance Requirements For Areas That Are Posted For Rigging Or Launching Sailboats.

Where The Body Of The Water Is Not Suitable For Sailing Or Where Sailing Is Prohibited, The Minimum Clearance For Electrical Lines Is Always 17 Feet.



In Waterways Suitable For **Sailing,** The NESC Clearance Requirement Changes Depending On The Surface Area Of The Body Of Water. The Larger The Body Of Water, The Higher The Required Clearance. Below Are The NESC Clearances For Waterways Suitable For Sailing:

•If The Surface Area Is Less Than 20 Acres, The Minimum Clearance Is 20.5 Feet;

Sailing

- If The Surface Area Is Between 20 And 200 Acres, The Minimum Clearance Is 28 Feet;
- If The Surface Area Is Between 200 And 2,000 Acres, The Minimum Clearance Is 34 Feet;
- If The Surface Area Is Over 2,000 Acres, The Minimum Clearance Is 40 Feet.

As With The Waterways Suitable For Sailing, NESC Clearances For Electrical Lines In Areas Posted For **Rigging Or Launching Sailboats** Change Depending On Surface Area Of The Body Of Water. Below Are The NESC Clearance Requirements For Land Or Water Areas That Are Posted For Rigging Or Launching Sailboats:

- If The Surface Area Is Less Than 20 Acres, The Minimum Clearance Is 25.5 Feet;

Rigging Or Launching Sailboats

If The Surface Area Is Between 20 And 200 Acres, The Minimum Clearance Is 33.5 Feet;

- If The Surface Area Is Between 200 And 2000 Acres, The Minimum Clearance Is 39.5 Feet;
- If The Surface Area Is Over 2000 Acres, The Minimum Clearance Is 45.5 Feet.

NESC

Clearances are Measured Based Upon The Highest Water Level.

If The Body Of Water Is Uncontrolled, The Clearance Is Measured Based Upon The Normal Flood Level.

The NESC Provides That, If Available, The Ten-year Flood Level May Be Assumed As The Normal Flood Level.